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PTO/SB/21 (09-04)

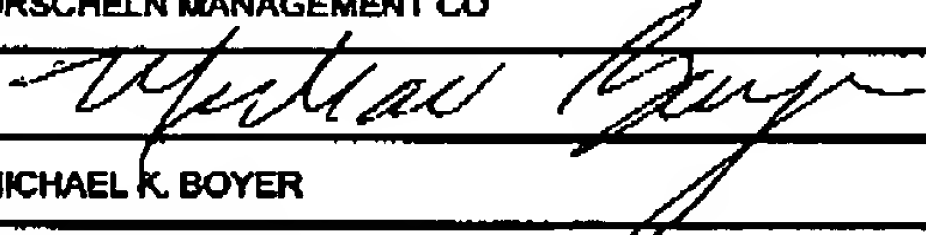
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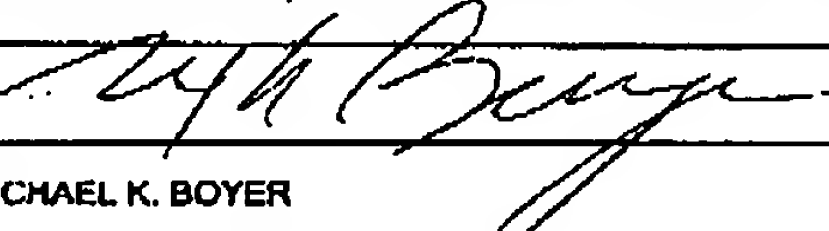
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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)  Total Number of Pages in This Submission <u>4</u>	Application Number	09/300,930
	Filing Date	APRIL 28, 1999
	First Named Inventor	PACHL
	Art Unit	1711
	Examiner Name	ZEMEL
	Attorney Docket Number	08003JP-3

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input checked="" type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PRE-APPEAL BRIEF REQUEST FOR REVIEW
Remarks CONFIRMATION NO.: 5002		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	ORSCHELN MANAGEMENT CO		
Signature			
Printed name	MICHAEL K. BOYER		
Date	DECEMBER 15, 2005	Reg. No.	33,085

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
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Typed or printed name	MICHAEL K. BOYER	Date	DECEMBER 15, 2005

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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) <u>03 003JP-3</u>	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>15 DECEMBER 2005</u> Signature <u>[Signature]</u> Typed or printed name <u>MICHAEL BOYER</u>		Application Number <u>09/300,930</u>	Filed <u>4/28/1999</u>
		First Named Inventor <u>PACHL</u>	
		Art Unit <u>1711</u>	Examiner <u>ZEMEL</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/98) <input checked="" type="checkbox"/> attorney or agent of record. <u>33,085</u> Registration number <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		<u>[Signature]</u> Signature <u>MICHAEL BOYER</u> Typed or printed name <u>660 269-4536</u> Telephone number <u>15 DECEMBER 2005</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input type="checkbox"/> Total of _____ forms are submitted.			

This collection of information is required by 36 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 36 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN THE APPLICATION OF:  
JEFFREY T. PACHL ET AL.

ATTORNEY DOCKET:  
OB003JP-3

SERIAL NO: 09/300,930  
CONFIRMATION NO.: 5002

EXAMINER: ZEMEL

FILED: April 28, 1999

ART UNIT: 1711

TITLE: "NOVEL FOAMING  
COMPOSITIONS AND METHODS  
FOR MAKING AND USING THE  
COMPOSITIONS"

Date: December 15, 2005

**REASONS SUPPORTING PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**Mail Stop AF**  
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Alexandria, Virginia 22313-1450

In support of the Pre-Appeal Brief Request For Review, please find the following Reasons.

### REASONS

Claims 1-41 are improperly rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. (USPN 3,154,504) in combination with Wycech (USPN 4,923,902) and Kagoshima et al. (U.S.P.N. 5,274,006).

#### **II. The Applied References Teach Away From Each Other And Cannot Be Properly Combined**

The final rejection is based upon a combination of all three references, Carey, Kagoshima and Wyceh. Carey and Kagoshima contain conflicting teachings and cannot be properly combined. Wyceh and Kagoshima also contain conflicting teachings and cannot be properly combined. Applicants, therefore, respectfully submit that a combination of Carey, Kagoshima and Wyceh is contrary to M.P.E.P. 2143.

The following summarizes the applied references:

A. Carey et al. (U.S.P.N. 3,154,504) discloses a method for making epoxy foam in which:

- 1) no heat is applied (Col. 1, Lines 51-54 - the use of elevated temperatures is avoided),
- 2) foamed without chemical blowing agents (Col 1, Lines 58-60 – without agents that decompose and release gas),
- 3) a single phase system is used,
- 4) slow-acting curing agents are used (Col 4, Lines 50-75),
- 5) a foam is produced by releasing pressure (Col 7, Lines 50-59),
- 6) discloses phosphoric acid as a slow-curing agent, and;
- 7) wetting agents/surfactants are objectionable/unnecessary (Col 3, Lines 5-10).

B. Kagoshima et al. (U.S.P.N. 5,274,006) discloses a heat cured epoxy foam in which:

- 1) a single-phase previously-shaped material foams after heat is applied. The curing agent is heat activated and reacts with epoxy only when heated to a defined temperature and a defined melt viscosity is achieved (refer to Pages 8 and 11 of Kagoshima's Amendment dated June 28, 1993 - a copy of the file history previously submitted),
- 2) requires chemical blowing agents having a specific decomposition temperature.
- 3) a surfactant is required, and;
- 4) a liquid epoxy is used (Page 3 of Kagoshima's January 25, 1993 Amendment from Kagoshima's file history).

C. Wycech (U.S.P.N. 4,923,902) discloses an epoxy foam formed by a delayed/retarded exothermic reaction which:

- 1) no heat is applied,
- 2) a two-phase system is used,
- 3) uses amine curing agents,
- 4) a chemical blowing agent is used, and;
- 5) no liquids are mixed (Pages 4 and 5 of Wycech's July 20, 1999 Amendment - a copy of the file history previously submitted).

Applicants respectfully submit that Carey, Kagoshima and Wycech are inconsistent and teach away from each other on virtually every important aspect of their respective inventions. These references teach away on whether a single or two phase system is used. These references teach away on whether the system is heat cured (i.e., whether external heat is applied). These references teach away on whether a chemical/decomposing blowing agent is employed. These references teach away on whether a surfactant is desirable. Applicants respectfully submit that a skilled person in this art, when considering these references as a whole, would lack the requisite motivation to combine these references together. Accordingly, Applicants respectfully submit that these references are not properly combined and a prima facie case of obviousness cannot be established.

### III. The Proposed Combination Renders The Primary Reference Incapable Of Its Intended Operation

The modifications proposed by the combination render Carey inoperable for its intended purpose. The final rejection relies upon the encapsulated blowing agents disclosed in Wycech. However, if Wycech teaches using encapsulated blowing agents, Wycech also teaches using such blowing agents in a two-phase system. In contrast, the system of Carey is intended to be operated as a single phase system. Wycech's two-phase slow expanding system precludes the rapid expansion relied upon by the single phase process of Carey (e.g., compare the thirty minute expansion time of Wycech on Col 7, Lines 60-65 to the release of super atmospheric pressure which causes immediate expansion Col 2, Lines 20- 31 and Col 7, Lines 50-58 of Carey). Similarly, heating sufficient to cause molten reaction conditions and the decomposing blowing agents taught by Kagoshima preclude operating the invention of Carey in the manner intended.

### IV. The Applied References Teach Away From The Claimed Invention

Carey teaches away from the claimed two part reaction system (e.g., A side/B side). Carey also teaches away from using heat from an exothermic reaction in the manner claimed. Carey teaches that "...the curing agents are sufficiently slow-reacting so that the heat released during the curing action can be dissipated at least in substantial part" (e.g., compare Col. 4, Lines 65-70 of Carey to instant Examples 18-23). In contrast to dissipating heat, the instant invention causes an exothermic reaction, while combining an epoxy and the curing agent, to generate an amount of heat sufficient to expand an encapsulated blowing agent.

Kagoshima requires a decomposing chemical blowing agent and, therefore, Kagoshima teaches away from using the claimed encapsulated blowing agent. Kagoshima also teaches away from the claimed curing agent (i.e., the claimed curing agent does not require heating and molten reactants).

Wycch teaches away from using the claimed curing agent. Wycch also teaches away from dispensing a foam into a cavity. The foam obtained by Wycch is formed in situ and not dispensed into a cavity.

**V. The Final Office Action "Picks And Chooses" Selected Portions Of The Applied References**

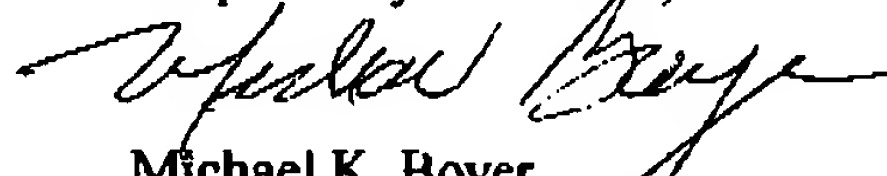
The Final Office Action relies upon "picking and choosing" selected portions of the applied references and, then combines the selected portions together. The teachings of the entire reference were not applied. Instead, Applicants respectfully submit that a reference must be considered as a whole when determining whether a proper combination can be made. That is, the remaining portions of the reference which teach away from each other and the claimed invention should also be considered. When the entire disclosure of the applied references is considered, Applicants respectfully submit that the references cannot be combined to establish a prima facie case of obviousness.

**Claims 37 – 39 Are Improperly Rejected Under 35 U.S.C. 112, First Paragraph**

Instant Figure 1 illustrates reaction times from 100 seconds down to almost zero. Such shows that Applicant was in possession of an invention that can employ a reaction time of less than 100 seconds. Examples 18-24 demonstrate the desirable results from using this reaction time range.

Should there be any fee due in connection with this response, please charge the same to Deposit Account No. 15-0680 (Orscheln Management Company). Should the Examiner deem that any further action on the part of Applicant would advance prosecution, the Examiner is invited to telephone Applicants' attorney.

Respectfully Submitted,



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